AMENDMENTS

In The Claims

1. (original) A chip package structure, comprising:

a carrier;

a chip, having an active surface with a plurality of bumps thereon, wherein the chip is flipped over and bonded to the carrier in a flip-chip bonding process so that the chip and the carrier are electrically connected;

a heat sink, set over the chip, wherein the heat sink has a surface area greater than the chip; and

an encapsulating material layer, filling a bonding gap between the chip and the carrier and covering the carrier, wherein the encapsulating material layer is formed in a simultaneous molding process and part of the surface of the heat sink away from the chip is exposed.

2. (original) The chip package structure of claim 1, wherein the encapsulating material layer between the chip and the carrier has a thickness such that maximum diameter of particles constituting the encapsulating material is less than 0.5 times the said thickness.

3. (original) The chip package structure of claim 1, wherein the package further comprises a thermal conductive adhesive layer set between the chip and the heat sink.

4. (original) The chip package structure of claim 1, wherein material constituting the encapsulating material layer comprises a resin.

5. (original) The chip package structure of claim 1, wherein material constituting

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the heat sink comprises a metal.

6. (original) The chip package structure of claim 1, wherein the package further comprises an array of solder balls attached to a surface of the carrier away from the chip.

7. (original) The chip package structure of claim 1, wherein the package further comprises at least a passive component set on and electrically connected with the carrier.

8. (original) The chip package structure of claim 1, wherein the carrier is selected from a group consisting of a packaging substrate or a lead frame.

Claims 9-26 (cancelled)

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